

CUPESID BEETLES ATTRACTED TO SOAP IN MONTANA

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Last summer, while in Glacier National Park, Montana, the writer's wife discovered hordes of large gray-and-black beetles flying feebly about in the vicinity of her laundry tubs and clustering upon clothing drying on the clothesline. This was on the morning of July 1st, while the author was fulfilling his duties as Ranger-Naturalist elsewhere in the park. She didn't bother to collect many of the insects, believing them to be some extremely common species. However, when the writer returned home that evening he was shocked to find that the collecting jar contained eleven specimens of *Priacma serrata* (LeC.). These weird Cupesidae are always considered a good find, so much so that a single specimen in flight near the summer cabin just three days earlier had caused great exultation; hence the catch resulted in much pleasure and amazement. On the following day (July 2, 1950), a neighbor began doing her wash in the woods behind the cabins (along the shore of Lake McDonald about 300 yards south of the Lake McDonald Hotel). Shortly after the soapy water had been fluffed up and the scrubbing of clothes begun, the cupesids made a mass invasion, fluttering about the washtub in large numbers. After the clothes were hung on the line, the beetles continued to flutter about and alight upon the damp clothing. A large percentage of them were noted to be pairing off and assuming mating positions. This continued until the clothes dried, after which the beetles disappeared. Without any effort to collect large numbers of specimens twenty-three Cupesids were picked up on this second washday. During the next few days energetic collecting was carried on in the woods of the area but no trace of *Priacma* was found. Yet on the 6th of July when another small wash was done the beetles again put in an appearance, although in no such large numbers. Only half a dozen of the most persistent and bothersome individuals were picked up that day, and during the rest of the summer not one was seen, even on washdays. This is the first record known to the author of the occurrence of *Priacma* in Montana, although its occurrence there is not surprising since it seems fairly abun-

dant in British Columbia under similar ecological conditions. The soap which proved such a lure for these beetles was Super Suds, and though it is not known whether other strong soaps would exercise the same attraction, it is presumed that they would.

At the close of the season, when a binocular microscope became available, all of these Cupesidae were examined more carefully and the male genital appendages were removed and studied. At this time the rather startling discovery was made that all forty of the beetles were males. It would therefore seem evident that the Super Suds served as a strong sexual attractant for the male cupesids, so potent in fact that many of them attempted to mate with other males while under the influence of the soapy odor.

The forests surrounding the cabins for a considerable distance are predominantly Western Larch (*Larix occidentalis* Nutt.) with a good representation also of Giant Western Redcedar (*Thuja plicata* Donn.), but no *Priacma* specimens were ever found except those in flight near the soap, hence their host plant remains unknown. Dr. E. C. Van Dyke relates (verbally) the finding of *Priacma* in the California Sierra Nevada upon fir trees, collected by beating the branches. The only firs present along Lake McDonald are an occasional (very rare) Grand Fir (*Abies grandis* Dougl.) and a few Douglas Firs (*Pseudotsuga taxifolia* Poir.). It is possible that the beetles discussed above migrated from some of these "fir" trees, but it remains for another summer's observations to verify that fact and to collect female specimens on the host plant.

Incidentally, the genitalic study has revealed the fact that, while the Montana, Washington and British Columbia specimens are *Priacma serrata* (LeC.) the *Priacma* species of California is evidently as yet undescribed. In another paper this description is soon to be published, with additional observations and drawings of the amazing and extremely complex male terminalia.